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UNITED STATES NAVAL OBSERVATORY

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POSITIONS, AREAS, AND COUNTS OF SUNSPOTS

SEPTEMBER, 1955

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These results are based upon measurements made at the Naval Observatory on plates secured either there or at the Mt. Wilson Observatory. The symbols used for the entries in the successive columns are as follows:

U.T., the epoch of observation in Universal Time.
No., the identifying number of the group assigned by Mt. Wilson.
Δl, the heliographic difference in longitude from the central meridian, measured positive to the west.
φ, the heliographic latitude, measured positive to the north.
ρ, the heliocentric angular distance from the line joining the centers of the Earth and Sun.
A, the true area of the umbra plus penumbra, expressed in millionths of the visible hemisphere.
s, the number of spots.

An asterisk means that no Mt. Wilson number was assigned. Plates secured at the Naval Observatory are indicated by N, and those at Mt. Wilson by M. The plate quality, which follows, is indicated by:

1, Poor; 2, Fair; 3, Good; 4, Very Good; 5, Excellent.

The following five quantities are listed successively at the end of each day, and give for that day:

1. The total number of groups, g.
2. The longitude of the central meridian, L_0.
3. The latitude of the center of the disc, B_0.
4. The total value of A.
5. The total value of s.

The mean daily area and the mean relative sunspot number, $r=10g+s$ are given at the end of the month.

These results are a continuation of those published in the *Monthly Weather Review* from February 1, 1927 to December 31, 1947.

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U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
1.664	11303	−74	+27	75	388	1
N−2	11304	−72	−21	76	48	1
	11302	−68	+19	69	24	1
	11302	−67	+17	68	97	1
	11301	−54	+31	56	73	1
	11301	−50	+30	53	16	1
	11300	−36	+25	39	194	1
	11298	+ 3	−20	27	16	2
	11298	+ 6	−21	28	12	1
	11298	+ 7	−20	28	48	1
	11299	+14	+30	26	6	1
	11299	+16	+28	26	6	1
	11297	+50	+18	50	12	1
	(8)	(246)	(+7)		940	14
2.733	11305	−68	+17	69	48	1
M−1	11305	−61	+16	61	36	2
	11305	−60	+16	61	48	1
	11303	−60	+26	62	339	1
	11304	−60	−23	66	24	1
	11304	−57	−22	63	121	1
	11302	−54	+17	54	61	2
	11301	−41	+31	45	48	2
	11301	−40	+31	44	24	1
	11301	−36	+30	41	32	2
	11300	−21	+24	26	32	1
	11300	−21	+25	26	133	1
	11298	+22	−20	35	32	3
	11296	+68	+45	71	16	1
	(8)	(232)	(+7)		994	20
3.681	11306	−86	+26	88	48	1
N−3	11306	−77	+27	79	218	1
	11305	−56	+17	56	48	3
	11305	−54	+17	54	12	1
	11305	−49	+16	49	36	3
	11305	−47	+16	47	24	1
	11303	−48	+26	51	364	1
	11304	−47	−23	55	12	1
	11304	−44	−22	52	97	1
	11302	−41	+17	42	61	2
	11301	−28	+31	35	24	4
	11301	−27	+30	34	12	2
	11301	−24	+29	33	12	1
	11300	− 9	+24	20	61	2
	11300	− 9	+23	18	16	1
	11300	− 8	+24	19	48	1
	11298	+34	−20	44	24	1
	(8)	(219)	(+7)		1117	27
4.591	11306	−73	+26	75	121	1
N−2	11306	−66	+27	68	194	2
	11305	−44	+17	45	16	1
	11305	−37	+16	38	48	3
	11305	−36	+16	37	24	1
	11303	−37	+26	41	412	2
	11304	−35	−23	46	24	1
	11304	−32	−22	43	145	1
	11302	−29	+17	31	73	1
	11301	−16	+30	27	6	1
	11301	−15	+30	26	12	1
	11300	+ 3	+24	17	85	4
	11307	+24	−23	38	12	1
	11307	+25	−23	38	32	1
	11307	+26	−24	40	16	1
	11307	+27	−23	40	48	3
	11298	+46	−19	53	16	1
	(9)	(207)	(+7)		1284	26
5.606	11308	−66	−26	71	12	1
N−2	11308	−65	−26	71	16	1
	11306	−59	+26	60	73	1
	11306	−52	+27	54	145	1
	11303	−25	+25	30	388	1
	11305	−23	+16	25	24	1
	11304	−21	−23	36	12	1
	11304	−17	−22	34	97	1
	11302	−18	+20	23	12	1
	11302	−16	+16	20	48	1
	11307	+37	−23	47	145	2
	11307	+43	−24	52	16	1
	11307	+44	−23	53	133	2
	(7)	(194)	(+7)		1121	15
6.550	11308	−58	−26	66	24	1
N−3	11308	−57	−27	65	16	1
	11306	−46	+25	48	24	4
	11306	−46	+26	48	48	1
	11306	−40	+27	44	145	1
	11303	−12	+26	23	364	1
	11304	− 7	−24	33	24	4
	11304	− 4	−22	29	97	1
	11302	− 5	+22	15	16	1
	11302	− 4	+17	12	48	2
	11307	+50	−23	57	170	3
	11307	+53	−25	61	24	1
	11307	+56	−24	63	48	5
	11307	+58	−23	65	194	1
	(6)	(181)	(+7)		1242	27
7.551	11308	−45	−27	56	16	1
N−4	11308	−38	−25	49	16	1
	11309	−35	−43	59	24	1
	11309	−32	−43	57	24	2
	11306	−34	+25	37	16	2
	11306	−34	+26	37	16	2
	11306	−27	+27	34	145	1
	11303	+ 1	+26	20	364	1

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U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
	11304	+ 8	−22	30	73	1
	11302	+ 8	+17	14	36	1
	11307	+65	−23	70	145	2
	11307	+66	−23	71	12	1
	11307	+67	−21	72	24	1
	11307	+70	−24	74	16	1
	11307	+72	−23	76	291	2
	(7)	(168)	(+7)		1218	20
8.554	11308	−33	−27	46	16	1
N–2	11308	−32	−28	47	73	1
	11308	−28	−27	44	32	2
	11308	−25	−25	40	16	1
	11309	−24	−42	54	36	2
	11309	−24	−43	54	24	1
	11309	−19	−42	52	73	2
	11306	−15	+26	24	145	2
	11303	+13	+26	23	388	1
	11304	+22	−22	36	61	1
	11302	+23	+18	26	48	1
	11307	+80	−23	83	145	1
	(7)	(155)	(+7)		1057	16
9.608	11308	−19	−27	38	16	8
M–4	11308	−18	−26	37	6	2
	11308	−17	−28	39	24	1
	11308	−17	−27	38	6	1
	11308	−14	−26	36	16	7
	11309	−10	−42	49	36	4
	11309	− 4	−41	48	16	4
	11306	− 6	+27	22	12	1
	11306	− 5	+26	20	16	3
	11306	− 1	+27	21	73	6
	11303	+24	+27	31	6	1
	11303	+27	+27	33	315	1
	11302	+37	+18	38	16	2
	11310	+54	+31	56	6	1
	(6)	(141)	(+7)		564	42
10.590	11311	−57	−27	64	16	1
N–2	11308	− 7	−28	36	85	3
	11308	− 2	−26	35	36	1
	11309	+ 1	−42	49	36	2
	11306	+ 6	+25	19	12	1
	11306	+ 7	+25	20	12	2
	11306	+11	+27	23	61	1
	11303	+35	+27	39	24	1
	11303	+36	+26	39	12	1
	11303	+39	+26	43	364	1
	11302	+48	+17	48	24	1
	11310	+63	+33	64	24	1
	11310	+63	+31	64	24	1
	(7)	(128)	(+7)		730	17

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
11.562	11312	−47	+22	48	16	1
N–2	11308	+ 5	−29	37	73	1
	11306	+24	+26	30	24	1
	11303	+47	+26	49	6	1
	11303	+52	+26	53	339	1
	(4)	(115)	(+7)		458	5
12.562	11312	−36	+23	38	61	3
N–2	11312	−32	+22	34	73	2
	11308	+18	−28	40	36	1
	11303	+65	+26	66	339	3
	(3)	(102)	(+7)		509	9
13.566	11312	−24	+23	27	97	2
N–2	11312	−24	+24	28	61	2
	11312	−21	+23	25	12	1
	11312	−20	+22	24	12	1
	11312	−19	+24	25	16	2
	11312	−17	+22	23	97	1
	11303	+80	+26	78	436	1
	(2)	(89)	(+7)		731	10
14.557	11312	−12	+23	19	73	3
N–2	11312	−11	+24	20	73	4
	11312	−10	+23	18	48	2
	11312	− 7	+24	19	12	1
	11312	− 7	+23	17	16	1
	11312	− 6	+22	16	73	5
	11312	− 4	+22	15	97	1
	(1)	(76)	(+7)		392	17
15.558	11316	− 6	+25	20	12	1
N–2	11312	+ 1	+23	16	36	2
	11312	+ 1	+24	17	16	1
	11312	+ 2	+23	16	32	3
	11312	+ 3	+25	19	16	1
	11312	+ 7	+21	15	61	2
	11312	+ 8	+20	16	73	1
	11315	+ 7	−27	35	48	1
	11315	+ 8	−27	36	16	1
	11315	+ 9	−27	36	16	1
	11315	+12	−26	35	73	2
	11314	+46	+28	49	36	1
	(4)	(62)	(+7)		435	17
16.559	11312	+14	+24	22	36	1
N–2	11312	+21	+21	24	48	1
	11312	+22	+20	25	85	2
	11315	+20	−26	38	24	1
	11315	+21	−26	39	12	1
	11315	+21	−25	37	16	1

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U.T.	No.	Δλ	φ	ρ	A	s
		°	°	°		
	11315	+26	−25	41	61	1
	(2)	(49)	(+7)		282	8
17.603	11317	+31	+34	39	12	1
M−2	11317	+34	+33	41	24	2
	11315	+34	−26	47	48	5
	11315	+41	−25	51	24	1
	11312	+36	+21	37	61	5
	11314	+75	+27	77	24	1
	(4)	(35)	(+7)		193	15
18.731	11319	+24	−24	39	48	1
N−1	11312	+53	+19	54	73	1
	(2)	(20)	(+7)		121	2
19.609	11319	+35	−24	46	16	6
M−4	11320	+42	−16	47	6	1
	11320	+42	−17	47	6	1
	11315	+60	−26	66	12	1
	11315	+65	−25	71	16	1
	11315	+65	−26	71	12	3
	11312	+61	+23	62	12	4
	11312	+62	+21	63	6	1
	11312	+64	+22	65	24	2
	(4)	(9)	(+7)		110	20
20.577	11315	+74	−28	79	48	1
N−2	11315	+78	−24	81	16	1
	11317	+76	+22	78	61	1
	(2)	(356)	(+7)		125	3
21.567					0	0
N−2						
	(0)	(343)	(+7)		0	0
22.606					0	0
M−4						
	(0)	(329)	(+7)		0	0
23.608	11322	−80	−23	83	48	2
M−4	11322	−80	−24	84	194	2
	(1)	(316)	(+7)		242	4
24.653	11322	−70	−24	74	24	1
M−3	11322	−66	−24	71	145	4
	11322	−66	−25	72	24	2
	11322	−65	−26	71	6	1
	11324	+ 4	−29	36	16	1
	11324	+ 7	−30	38	24	5
	11323	+66	+24	67	12	2
	11323	+66	+26	67	6	2
	11323	+68	+25	69	16	4
	(3)	(302)	(+7)		273	22
25.633	11322	−52	−24	59	73	1
N−3						
	(1)	(289)	(+7)		73	1
26.584	11322	−41	−25	51	24	1
N−2	11322	−38	−24	49	73	1
	(1)	(277)	(+7)		97	2
27.567	11322	−30	−25	44	24	1
N−2	11322	−29	−26	44	24	2
	11322	−28	−24	43	36	2
	11322	−26	−25	41	48	2
	11326	+56	+36	60	36	1
	(2)	(264)	(+7)		168	8
28.573	11322	−16	−24	35	48	4
N−3	11322	−14	−25	35	16	1
	11322	−12	−26	36	12	1
	11322	−11	−27	36	12	1
	11327	+16	+22	22	12	2
	(2)	(251)	(+7)		100	9
29.569	11325	−15	+22	21	16	1
N−3	11328	−11	−15	25	12	1
	11322	− 6	−23	31	16	1
	11322	− 5	−23	30	12	1
	11322	− 3	−24	32	32	2
	11322	+ 2	−26	34	24	1
	(3)	(237)	(+7)		112	7
30.597	11331	−86	+23	85	436	1
M−5	11329	−70	−23	75	16	1
	11329	−65	−23	69	24	5
	11330	−65	+31	67	6	1
	11330	−65	+32	67	6	1
	11330	−64	+31	66	16	4
	11330	−63	+32	65	6	1
	11330	−61	+28	63	16	3
	11325	− 2	+23	16	16	4
	11325	− 1	+25	18	6	1
	11325	+ 1	+24	17	6	1
	(4)	(224)	(+7)		554	23

Mean for 30 days
A=508, r=52.9

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